

In the Claims

1. (Currently amended) A polyester multifilament yarn comprising a plurality of polytrimethylene terephthalate filaments that form the yarn such that the yarn has strength from a stress-strain curve of at least 3 cN/dtex and a Young's modulus of no more than 25 cN/dtex breaking extension of 40% or more, wherein a minimum value of a differential Young's modulus at 3 - 10% extension is no more than 6.6 cN/dtex, an elastic recovery following 10% elongation is at least 90%, a CF value is 1 - 30, and a CV value of the continuous shrinkage in a lengthwise direction of the yarn is no more than 4%, and the yarn is produced by:

spinning at a rate of at least 2000 m/min,

drawing at a low draw rate by means of a first heated roll and a second heated roll,

heat-treating plural laps of the yarn at the second heated roll with a surface roughness of 1.5S to 8S at 105 to 180°C,

heat treating for relaxation at a relaxation factor of 6 to 20%, and

subjecting to an interlacing treatment.

2. (Previously presented) The polyester yarn according to claim 1, wherein the Young's modulus is no more than 22 cN/dtex.

3. (Previously presented) The polyester yarn according to Claim 1, wherein the minimum value of the differential Young's modulus at 3-10% extension is no more than 5 cN/dtex.

4. (Previously presented) The polyester yarn according to Claim 1, wherein the breaking extension is at least 45%.

5. (Previously presented) The polyester yarn according to Claim 1, wherein the elastic recovery following 10% elongation is at least 95%.

6. (Previously presented) The polyester yarn according to Claim 1, wherein the degree of

crystallinity is at least 30%.

7. (Previously presented) The polyester yarn according to Claim 1, wherein boiling water shrinkage is 3 - 15% and a maximum value of the shrinkage stress is no more than 0.3 cN/dtex and the temperature at which the maximum value of shrinkage stress is shown is at least 120°C.

8. (Previously presented) The polyester yarn according to Claim 7, wherein the maximum value of the shrinkage stress is 0.15 to 0.25 cN/dtex.

9. (Previously presented) The polyester yarn according to Claim 7, wherein the temperature at which the maximum value of shrinkage stress is shown is at least 130°C.

Claims 10 - 11 (Cancelled)

12. (Previously Presented) The polyester yarn according to Claim 1, wherein the CF value is 5 - 25.

13. (Previously presented) The polyester yarn according to Claim 1, wherein the fineness of individual filaments from which the polyester yarn is composed is no more than 3 dtex.

14. (Previously presented) A woven fabric comprising the polyester yarn according to Claim 1 wherein the warp yarn and/or the weft yarn is a twisted yarn of twist coefficient 10,000 to 20,000.

15. (Currently Amended) A method of producing multifilament yarn, wherein a polymer substantially comprising polytrimethylene terephthalate of intrinsic viscosity (η) at least 0.7 is melt spun and hauled-off at a spinning rate of at least 2000 m/min and, without winding up, subjected to drawing performed between a first heated roll and a second heated roll at low draw rate to keep breaking extension of the yarn at 40% or more, and continuously subjected to a heat-treatment at the second roll and a relaxation heat treatment at a relaxation factor of 6 to 20%, using [[a]]the second heated roll of surface roughness 1.5S - 8S at 105 - 180°C, by plural laps of the yarn, after which it is

continuously subjected to an interlacing treatment to make its CF value 1 - 30 and wound up as a package.

16. (Previously presented) The method of producing polyester yarn according to Claim 15, wherein the intrinsic viscosity of the polytrimethylene terephthalate is at least 0.8.

17. (Previously presented) The method of producing polyester yarn according to Claim 15, wherein melt spinning is carried out at a temperature 20 - 50°C higher than the melting point of the polytrimethylene terephthalate.

18. (Previously presented) The method of producing polyester yarn according to Claim 15, wherein the polytrimethylene terephthalate is hauled-off at a spinning rate of at least 3,000 m/min.

19. (Previously presented) The method of producing polyester yarn according to Claim 15, wherein the relaxation heat treatment is carried out at a relaxation factor of 8 to 18%.

20. (Cancelled)

21. (Previously presented) The method of producing polyester yarn according to Claim 15, wherein the second heated roll has surface roughness 3.2S - 6.3S.

22. (Previously presented) The method of producing polyester yarn according to Claim 15, wherein the drawing temperature is 10 - 50°C higher than the glass transition temperature of polytrimethylene terephthalate.

23. (Cancelled)

24. (Previously presented) The method of producing polyester yarn according to Claim 15, wherein the drawing is carried out at low draw rate, that the polyester yarn have strength from a stress-strain curve of at least 3 cN/dtex and a breaking extension of at least 42%.

25. (Previously Presented) The polyester yarn according to Claim 1, wherein the

polytrimethylene terephthalate contain at least 90 mol% of structural units obtained from terephthalic acid as an acid component and 1,3-propanediol as a glycol component.

26. (Previously Presented) The polyester yarn according to Claim 25, wherein copolymerizable compounds that may be copolymer components of the filaments are selected from the group consisting of isophthalic acid, succinic acid, cyclohexanedicarboxylic acid, adipic acid, dimer acid, sebacic acid and 5-sodiumsulphoisophthalic acid.

27. (Previously Presented) The polyester yarn according to Claim 25, wherein copolymerizable compounds that may be copolymer components of the filaments are selected from the group consisting of isophthalic diol, succinic diol, cyclohexanedicarboxylic diol, adipic diol, dimer diol, sebacic diol and 5-sodiumsulphoisophthalic diol, ethylene glycol, diethylene glycol, dipropylene glycol, butanediol, neopentyl glycol, cyclohexanediethanol, polyethylene glycol and polypropylene glycol.

28. (Previously Presented) The polyester yarn according to Claim 1, further comprising at least one component selected from the group consisting of titanium dioxide as a delustrant, fine silica or alumina particles as a lubricant, hindered phenol derivatives as an antioxidant and coloring pigments.